## Claims:

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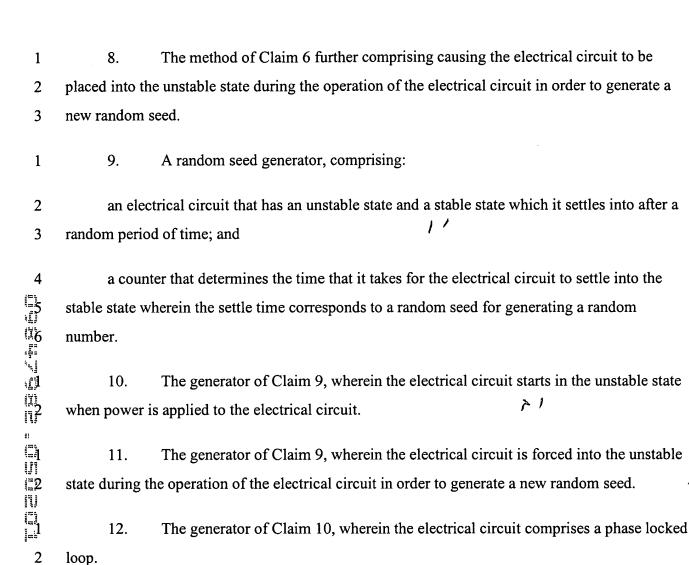
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- 1. A random number generator, comprising an electrical circuit that has an unstable ///
  2 state and a stable state which it settles into after a random period of time; a counter that //
  3 determines the time that it takes for the electrical circuit to settle into the stable state; and a

  generator that generates a random number using the settle time as the random seed.
  - 2. The generator of Claim 1, wherein the electrical circuit starts in the unstable state when power is applied to the electrical circuit.
  - 3. The generator of Claim 1, wherein the electrical circuit is forced into the unstable state during the operation of the electrical circuit in order to generate a new random seed.
  - 4. The generator of Claim 2, wherein the electrical circuit comprises a phase locked loop.
  - 5. The generator of Claim 4, wherein the counter further comprises a counter that counts the number of meta-stable clock ticks of the phase locked loop during the settle time of the phase locked loop and wherein the random seed comprises the number of meta-stable clock ticks of the phase locked loop during the settle time. 6 18
    - 6. A random number generation method, comprising: 5 incluse to claim / >
- providing an electrical circuit that has an unstable state and a stable state which it settles into after a random period of time;
- counting the time that it takes for the electrical circuit to settle into the stable state; and generating a random seed based on the settle time of the electrical circuit.
- 7. The method of Claim 6 further comprising applying power to the electrical circuit so that the electrical circuit starts in the unstable state when power is applied to the electrical circuit.



- 13. The generator of Claim 12, wherein the counter further comprises a counter that counts the number of meta-stable clock ticks of the phase locked loop during the settle time of the phase locked loop and wherein the random seed comprises the number of meta-stable clock ticks of the phase locked loop during the settle time.
  - 14. A random seed generation method, comprising:
- providing an electrical circuit that has an unstable state and a stable state which it settles
  into after a random period of time; and

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- counting the random time that it takes for the electrical circuit to settle into the stable state wherein the settle time corresponds to a random seed for generating a random number.
  - 15. The method of Claim 14 further comprising applying power to the electrical circuit to put the electrical circuit into the unstable state.
  - 16. The method of Claim 14 further comprising causing the electrical circuit to enter the unstable state during the operation of the electrical circuit in order to generate a new random seed.
    - 17. A computer system that generates a random number, comprising:

a phase locked loop circuit that has an unstable state and a stable state that it enters after some random period of time;

a counter for determining the period of time for the phase locked loop to settle into the stable state, the settle time corresponding to a random seed; and

a generator for applying the random seed to a random number generator in order to generate a random number.

18. The computer system of Claim 17, wherein the counter further comprises a counter that counts the number of meta-stable clock ticks of the phase locked loop during the settle time of the phase locked loop and wherein the random seed comprises the number of meta-stable clock ticks of the phase locked loop during the settle time.